

WHAT IS CLAIMED:

1. A process for producing a paper wrapper having reduced ignition proclivity characteristics when incorporated into a smoking article comprising the following steps:

5 providing a paper wrapper comprised of a paper web;

applying a film-forming composition to said paper wrapper at particular locations, said film-forming composition forming treated discrete areas on said wrapper, said discrete areas separated by untreated areas, said film-forming composition comprising an aqueous composition, said film-forming composition containing a film-forming material and a particulate, substantially non-reactive inorganic filler, said treated discrete areas reducing ignition proclivity, said treated areas reducing ignition proclivity by reducing oxygen to a smoldering coal of the cigarette as the coal burns and advances into said treated areas.

2. A process as defined in claim 1, wherein the film-forming material comprises an alginate, a pectin, a silicate, a cellulose derivative, guar gum, a starch, a modified starch, polyvinyl acetate, or a polyvinyl alcohol.

20 3. A process as defined in claim 1, wherein the inorganic filler comprises a clay, calcium carbonate, or a metal oxide.

4. A process as defined in claim 2, wherein the inorganic filler comprises a clay, calcium carbonate, or a metal oxide.

25 5. A process as defined in claim 1, wherein the inorganic filler comprises calcium carbonate.

6. A process as defined in claim 2, wherein the inorganic filler comprises calcium carbonate.

30 7. A process as defined in claim 1, wherein multiple layers of the film-forming composition are applied to the paper wrapper for forming the treated discrete areas.

8. The process of claim 7, wherein said multiple layers are applied to the paper wrapper using a method selected from the group consisting of flexography, direct gravure printing, and offset gravure printing.

5 9. The process as in claim 1, wherein said treated areas comprise a plurality of discrete circumferential bands disposed longitudinally along said smoking article.

10. The process of claim 1, wherein said film-forming composition comprises an alginate.

10 11. The process of claim 1, wherein said film-forming composition comprises a pectin.

12. The process of claim 1, wherein said film-forming composition comprises a silicate.

15 13. The process of claim 1, wherein said film-forming composition comprises a polyvinyl alcohol.

14. The process of claim 1, wherein the film-forming composition comprises a starch.

15. The process of claim 1, wherein the film-forming composition comprises a cellulose derivative.

20 16. The process of claim 1, wherein the paper wrapper has a permeability of at least about 60 Coresta prior to applying said film-forming composition.

25 17. The process of claim 16, wherein said paper wrapper has a permeability of less than about 20 Coresta within the treated discrete areas.

18. The process of claim 1, wherein the treated discrete areas have a BMI of from about 1 cm^{-1} to about 8 cm^{-1} .

30 19. A process for producing a smoking article comprising the step of surrounding a tobacco column with the paper wrapper defined in claim 1.

20. A smoking article having reduced ignition proclivity characteristics comprising:

a column comprising a tobacco; and

a paper wrapper surrounding the column of the
5 tobacco, the paper wrapper including discrete areas treated with an aqueous film-forming composition, the treated areas being separated by untreated areas, the film-forming composition comprising a film-forming material and a substantially non-reactive inorganic filler, the treated areas reducing ignition proclivity by reducing oxygen to a smoldering
10 coal of the smoking article as the coal burns and advances into the treated areas.

21. A smoking article as defined in claim 20, wherein the film-forming material comprises an alginate, a pectin, a silicate, a cellulose derivative, guar gum, a starch, a modified starch, polyvinyl acetate, or a
15 polyvinyl alcohol.

22. A smoking article as defined in claim 20, wherein the inorganic filler comprises a clay, calcium carbonate, or a metal oxide.

23. A smoking article as defined in claim 21, wherein the inorganic filler comprises a clay, calcium carbonate, or a metal oxide.

20 24. A smoking article as defined in claim 20, wherein the inorganic filler comprises calcium carbonate.

25. A smoking article as defined in claim 21, wherein the inorganic filler comprises calcium carbonate.

26. A smoking article as defined in claim 20, wherein the
25 treated areas comprise multiple layers, at least one layer comprising the film-forming composition.

27. The smoking article as defined in claim 20, wherein said treated areas comprise a plurality of discrete circumferential bands disposed longitudinally along said smoking article.

28. The smoking article as defined in claim 20, wherein said film-forming composition comprises an alginate.

29. The smoking article as defined in claim 20, wherein said film-forming composition comprises a pectin.

5 30. The smoking article as defined in claim 20, wherein said film-forming composition comprises a silicate.

31. The smoking article as defined in claim 20, wherein said film-forming composition comprises a polyvinyl alcohol.

10 32. The smoking article as defined in claim 20, wherein the film-forming composition comprises a starch.

33. The smoking article as defined in claim 20, wherein the film-forming composition comprises a cellulose derivative.

15 34. The smoking article as defined in claim 20, wherein the paper wrapper has a permeability of at least about 60 Coresta prior to applying said film-forming composition.

35. The smoking article as defined in claim 34, wherein said paper wrapper has a permeability of less than about 20 Coresta within the treated discrete areas.

20 36. The smoking article as defined in claim 20, wherein the treated discrete areas have a BMI of from about 1 cm^{-1} to about 8 cm^{-1} .

37. A paper wrapper for a smoking article that provides the smoking article with reduced ignition proclivity characteristics comprising:

a paper web designed to surround a smokeable filler, the paper web including discrete areas treated with a film-forming composition, the treated areas being separated by untreated areas, the
25 film-forming composition comprising an aqueous composition containing a film-forming material and a substantially non-reactive inorganic filler, the filler comprising a clay, calcium carbonate, or a metal oxide, the film-forming material comprising an alginate, a pectin, a silicate, a cellulose
30 derivative, guar gum, a starch, a modified starch, polyvinyl acetate, or a

polyvinyl alcohol, the treated areas reducing the ignition proclivity of a smoking article incorporating the wrapper.

38. The paper wrapper as defined in claim 37, wherein the paper wrapper has a permeability of at least about 60 Coresta prior to
5 applying said film-forming composition.

39. The paper wrapper as defined in claim 37, wherein the film-forming material comprises an alginate.

40. The paper wrapper as defined in claim 37, wherein the filler comprises calcium carbonate.